

PO No	Supplier Line Ref No	Supplier Ref No	Terms	Purchased Item	Description	For	Equipment ID	Order Date	Received Qty	Due Date	Accounting No	Job No	Container No	No	Received Date	Status	Stock	3/19/2018	Price/Unit
PO039320	AC1001-VC	4	1	Net 30	M304S11GA	304/316 0.125 Sheet	MATERIAL: AISI 304/316		64	3/21/2018				64		SO52627	Stock	3/19/2018	\$ 12.23 / sf
		5			M304S18GA	304/316 0.05 Sheet	MATERIAL: AISI 304/316	SS SHEET ANNELLED	128					128		SO52628	Stock	3/19/2018	\$ 5.36 / sf
		9			M1018R0.313	1018-1025 Round Bar	MATERIAL: AISI 304/316	SS SHEET ANNELLED	12					12		SO52629	Stock	3/19/2018	\$ 0.21 / ft
		10			M6061T6B2.500X01.500	6061-T6 Bar 2.50 X 1.50 :	MATERIAL: 6061-	ALUMINUM BAR PER	24					24		SO52630	Stock	3/19/2018	\$ 14.36 / ft
		12			M6061T6B1.250X03.000	6061-T6 Bar 1.250 X 3.00 :	MATERIAL: 6061-	ALUMINUM BAR PER	12					12		SO52631	Stock	3/19/2018	\$ 14.36 / ft
		13			M6061T6B1.000X02.000	6061-T6 Bar 1.00 X 2.00 :	MATERIAL: 6061-	ALUMINUM BAR PER	40					40		SO52632	Stock	3/19/2018	\$ 7.46 / ft
		14			M6061T6B1.000X06.000	6061-T6 Bar 1.00 X 6.00 :	MATERIAL: 6061-	ALUMINUM BAR PER	24					24		SO52633	Stock	3/19/2018	\$ 19.45 / ft
		15			M304R0.375	304 Round Bar 0.375 :	MATERIAL: AISI 304/316	SS ROUND BAR AS PER	36					36		SO52634	Stock	3/19/2018	\$ 1.19 / ft
		18			M6061T6R1.125	6061 Round Bar 1.125 :	MATERIAL: 6061-	ALUMINUM ROUND BAR	12					12		SO52635	Stock	3/19/2018	\$ 3.45 / ft

Purchasing Receipts

Dart Hawkesbury 1270 Aberdeen St. Hawkesbury, ON K6A 1K7 Canada
(613) 632-5200

DART AE 05 PLACE

PO No	Supplier No	Item No	Line No	Term	Purchased Item	For Description	Part ID	Equipment ID	Order Date	Received Date	Quantity	Container No	Job No	Status	Receive Date	Price/Unit
19					M6061TR0250	6061-T6 Round Bar	0.250" : MATERIAL:	6061			20	SO52636	Stock	3/19/2018	\$ 0.16 / ft	
20					M6061TR1500	6061-T6 Round Bar 1.50 :	MATERIAL: 6061				20	SO52637	Stock	3/19/2018	\$ 5.52 / ft	
21					M6061TR2000	6061-T6 Round Bar 2.00 :	MATERIAL: 6061				20	SO52638	Stock	3/19/2018	\$ 9.81 / ft	

Line	Item	Part	Supplier	Description	Part No	Status	Due	Order	Received	Quantity	Quantity	Balance	Price (CAD)	Extended
Items														
6	M2024T3S.032	2024-T3 .032 Sheet	Firmed 3/21/18	2024-T3	MATERIAL: 2024-T3	ALUMINUM SHEET AS	PER QO-A-250/4 OR	AMS-QQ-A-250/4 OR	AMS-QA-A-250/4 OR	AMS 4037 OR ASTM	PER QO-A-250/4 OR	AMS-QA-A-250/4 OR	9-89	
7	M2024T3S.040	2024-T3 .040 Sheet	Firmed 3/21/18	96 sf	0 sf	96 sf	\$537.78	\$537.78	0 sf	96 sf	\$5.601875/sf	\$537.78	DAS 11 MAR 16 2018	
8	MT-4140QT-R1.125	AISI 4140 Quenched	Firmed 3/21/18	20 ft	0 ft	20 ft	\$7.75/ft	\$155.00	0 ft	20 ft	4142 QT	4142 QT	DAS 11 9-89	
9	M1018R0.313	1018-1025 Round Bar	Firmed 3/21/18	12 ft	0 ft	12 ft	\$0.2141666/ft	\$2.57	0 ft	12 ft	313	313	DAS 11 MAR 19 2018	
10	M6061T6B2.500X01.500	6061-T6 Bar 2.50 X 1.50	Firmed 3/21/18	24 ft	0 ft	24 ft	\$14.36125/ft	\$344.67	0 ft	24 ft	receive ft	receive ft	DAS 11 9-89	
11	M6061T6B1.000X5.000	6061-T6 Bar 1.000 X 5.000	Firmed 3/21/18	24 ft	0 ft	24 ft	\$19.7925/ft	\$475.02	0 ft	24 ft	ASTM B221	ASTM B221	DAS 11 MAR 19 2018	

Line	Item	Part	Supplier	Part No	Description	Status	Order Date	Quantity	Quantity	Balancne	Unit Price (CAD)	Extended Price
Items												
12	M6061T6B1.250X03.000	6061T6 Bar 1.250 X 3.000	Firmed	3/21/18	12 ft	0 ft	12 ft	\$14.361666/ft	\$172.34			
13	M6061T6B1.000X02.000	6061-T6 Bar 1.00 X 2.00	Firmed	3/21/18	40 ft	0 ft	40 ft	\$7.46275/ft	\$298.51			
14	M6061T6B1.000X06.000	6061T6 Bar 1.00 X 6.00	Firmed	3/21/18	24 ft	0 ft	24 ft	\$19.451666/ft	\$466.84			
15	M304R0.375	304 Round Bar 0.375	Firmed	3/21/18	36 ft	0 ft	36 ft	\$1.188/ft	\$42.77			
16	M303H0.500	303 Hex Bar .500	Firmed	3/27/18	36 ft	0 ft	36 ft	\$9.817777/ft	\$353.44	9-89 DAS 11		
17	M303R0.625	303 Round Bar 0.625"	Firmed	3/21/18	12 ft	0 ft	12 ft	\$7.92666/ft	\$95.12	9-89 DAS 11		

Plex 3/15/18 11:10 AM dar.lavoice.chatra

Order Notes	Procurement Quality Clauses
A005 right of entry	A012 chemical and physical test report
A016 personnel qualification	A017 raw material identification (as applicable)
A026 certification of material conformance	A041 quality management system
A042 part notification by supplier	A043 retention of quality documents
A048 counterfeit parts avoidance, detection, mitigation and disposition program	A049 supplier awareness
Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.darinspace.com for further explanation.	

DELIVERY - CLIENT

Copy C000078754



ACIER OUELLETTE INC.

935, Boul. du Hâvre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Customer N° CLI0001056
Date 2018/03/15
Delivery date 2018/03/16
Your order N° 039320

Processed by Josianne Bourdon
Salesman
Carrier
Credit Termes

OUELLETTE VALLEYFIELD
Net 30 Days

Instruction F-M

Delivery Route 5

Page 1

Product Description

Weight Qty U/M

Page

1

PCS NB Internal Use Only

1 SHEET SS 11G SS304-2B (4 X 8)

FESS-11G483042B

3402

336.00 64.00 PI2_\$CLB

CMD EXP B/O

IN I S C OUT

DAS

9-89

64¹¹₂ MAR 19 2018 11¹₉₋₈₉

2 SHEET SS 18G SS304-2B (4 X 8)

FESS-18G483042B

3425

268.80 128.00 PI2_\$CLB

UT

128¹₂

DAS

9-89

MAR 19 2018 11¹₉₋₈₉

3 ROUND CR 5/16-1018(R)

RCR-516

5348

3.13 12.00 PI_\$CLB

1X12

12¹₁

DAS

9-89

MAR 19 2018 11¹₉₋₈₉

4 FLAT ALU 1 1/2 X 2 1/2 6061-T6 *

FAL-112212

2439

105.74 24.00 PI_\$CLB

2X12

24¹₁

DAS

9-89

MAR 19 2018 11¹₉₋₈₉

DELIVERY - CLIENT

Copy C000078754



ACTER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tel.: 450-377-4248 Mtl; 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl; 514-336-4246 Ext.: 866-456-4242

Billed to

DART AEROSPACE LTD
1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Page

2

Product Description	Weight	Qty	U/M	CMD	EXP	B/O	IN	I	S	C	Internal Use Only	
											PCS NB	OUT
5 FLAT ALU 1 1/4 X 3 6061-T6 *	52.87	12.00	PL-\$CLB				1x10					DAS 1/1 9-89
FAL-1143 2458												
1 X 12' HEAT: 38355 LINE 13												
6 FLAT ALU 1 X 2 6061-T6 *	96.00	40.00	PL-\$CLB				2x30'	40'				DAS 1/1 9-89
FAL-12 2497												
2 X 20' HEAT: 3B6402 LINE 14												
7 FLAT ALU 1 X 6 6061-T6 *	169.18	24.00	PL-\$CLB				2x12'					DAS 1/1 9-89
FAL-16 2536												
2 X 12' HEAT: 37241 LINE 15												
8 ROUND SS 3/8 304 (R)	13.54	36.00	PL-\$CLB				3x12''	36'				DAS 1/1 9-89
RSS-38 5768												
3 X 12' R/L HEAT: 646M LINE 16												

DELIVERY - CLIENT

Copy C000078754



ACTER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1

Tel.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Billed to

DART AEROSPACE LTD

1270, ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE

Tél.: 613-632-5200

Your order N°

039320

Processed by

Josianne Bourdon

Salesman

OUELLETTE VALLEYFIELD

Carrier

Net 30 Days

Credit Termes

Instruction F-M

Delivery Route 5

Page 3

Product Description	Weight	Qty	U/M	PCS NB		Internal Use Only					
				CMD	EXP	B/O	IN	I	S	C	OUT
9 ROUND ALU 1 1/8 6061-T6 *	14.00	12.00	PL-\$CLB				12				DAS 9-89
RAL-118 5124											
1 X 12' HEAT: Z00238043 LINE 19											
10 ROUND ALU 1/4 6061-T6 *	1.16	20.00	PL-\$CLB				1x20				DAS 9-89
RAL-14 5135											
1 X 20' HEAT: 67081 LINE 20											
11 ROUND ALU 1 1/2 6061-T6 *	41.52	20.00	PL-\$CLB				20				DAS 9-89
RAL-12 5119											
1 X 20' HEAT: 36375 LINE 21											
12 ROUND ALU 2 6061-T6 *	73.80	20.00	PL-\$CLB				20				DAS 9-89
RAL-2 5149											
1 X 20' HEAT: SKD162058 LINE 22											



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K1Z3
Canada

#3402

METALLURGICAL TEST REPORT

6870 Highway 42 East
Glen, KY 41045-9615
(502) 347-6000

Certificate: 323707 5

Customer: 007025 001

Your Order: C17720

NAS Order: DS 0012604 01

Date: 8/16/2017 Page: 1
Steel: 304/304L
Finish: 2B
Corrosion: ASTM A262/15 A,180Bend-O

PRODUCT DESCRIPTION:

col
STAINLESS STEEL SHEET, C.R. ANNEALED & PICKLED; UNS 30400/30403
ASTM A240/16a, A480/16b, A666/15, ASME SA340/15, SA480/15, SA666/15
CHEM ONLY ON FOLLOWING ASTM: A376/17, A479/17, A484/16, A312/16
CHEM ONLY ON FOLLOWING ASME: SA312/13, SA479/13
AMS 5511H/5513J XMRK, MIL-5059D AMD3(X CRN MEAS), MIL-4043B
MIN. SOLUTION ANNEAL TEMP 1900°, WATER QUENCHED

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1; ROHS 1 & 2 Compliant
Material is Free of Radioactive Contamination
Steel Making Process: EAF, AOD, & Coat. Casting
Product Mfg. by a Quality Mgt. Sys. in Conf. w/ISO 9001
*Melted & Manufactured in the USA, Mat'l is DFARS Compliant

Product Id	Coil #	Skid #	Thickness	Width	Weight	Length	Mark	Pieces	Commodity Code
E26433	01459P P		.1200	48.0000	4,175	SHEETS	096.00	1	27 NA

CHEMICAL ANALYSIS CM(Country of Mfg) ES(Spain) US(United States) ZA(South Africa) JP(Japan) Lab Accreditation Bureau, ISO/IEC 17025, Certificate# L2323
HEAT
C % C % CR % CU % NEN % MO % N % NI % P % S %
459P
US .0162 18.2830 .4160 1.7765 .3080 .0631 8.0020 .0310 .0010
SI %
.3100

MECHANICAL PROPERTIES

Product Id#	Coil #	UTS	20C	.2% YS	20C Elong	% Hard	Tail
E26433	01459P	P T	93.97	47.25	48.77	85.00	85.50

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

P0,9609

fess-1164830426

Technical
Dept. Mgr.
Kris Lark
8/16/2017

#3425

44461

INSPECTION CERTIFICATE

PRIMARY COLOR ROLLED STAINLESS STEEL SHEETS
AS SHOWN TO FINISH WITH PAPER INTERLAYERED
A.S.T.M. 304

345, SHUN AN RD, LU CHU HSIAO
KAOHSIUNG HSIEH TAIWAN R.O.C.
TEL:07/6872845 FAX:07/6803068
CERTIFICATE NO:ITMS10-1

REVIEW: HUMAN MERCURY CONTAMINATION

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN WAS
PACED IN ACCORDANCE WITH THE RULES OF THE MAIL CERTIFICATE

AS IN AUEB. PLEASE SAVE IT AS AN E-BOOK
COUNTRY OF MELTING MANUFACTURE: TAIWAN

a. Other Element: MERCURY FRESH

CERTIFICADO DE CALIDAD/QUALITY REPORT

3.1 DE acuerdo a Norma Accreditación (s):

ALBARAN 49784 LES ACIERS TRANSBEC (1997) LTDÉ

Program steering practices, technical interface, and continuities.

Observaciones: BARRAS DE ACERO ESTIRADAS EN FRIO SIN ALEAR

DESCRIPTION	CLASS	OF	EN 10277-1
1018 RED. ESTIRAD 25,40 (1")	2	137149	
1018 RED. ESTIRAD 25,40 (1")	2	141109	
1018 RED. ESTIRAD 7,94 (3/16")	2	141112	
1018 RED. ESTIRAD 17,46 (11/16")	2	141114	
1018 RED. ESTIRAD 25,40 (1")	2	141110	
1018 RED. ESTIRAD 31,75 (1 1/4")	2	140119	
1018 RED. ESTIRAD 6,35 (1/4")	2	141129	
1018 RED. ESTIRAD 19,05 (3/4")	2	141267	
1018 RED. ESTIRAD 28,58 (1 1/8")	2	141280	
1018 RED. ESTIRAD 25,40 (1")	2	141279	
1018 RED. ESTIRAD 30,16 (3/16")	2	141269	
1018 RED. ESTIRAD 30,40 (1")	2	916831	
1018 RED. ESTIRAD 25,40 (1")	2	141287	
1018 RED. ESTIRAD 25,40 (1")	2	141111	

CERTIFICADO DE CALIDAD/QUALITY REPORT

De acuerdo a /Made according to:

EN 10204/DIN 50049

3.1

Nº CERTIFICADO / CERTIFICATE NR.: 49784

ALBARAN	49784	DETALLE Note Nr.	CUSTODIA	CLIENTE LES ACCIERS TRANSBEC (1997) LTÉE	DETALLE	Norma : EN 10277	DEPARTAMENTO DE CALIDAD: Produkte de acuerdo. Condiciones técnicas de suministro.	DEPARTAMENTO DE CALIDAD: Certifica que el mencionado producto cumple con las especificaciones del cliente.	QUALITY DEPARTMENT: Certifica que the product fulfills the order specifications.	Fecha/Date: 23/11/2017	Firmado: Susana Fernández	Directora de Calidad	TOVERHEDEAD	www.calibradoss.com	Sistema de Gestión ISO 9001:2008	ALBARADOS S.A.
---------	-------	------------------	----------	--	---------	------------------	---	--	--	------------------------	---------------------------	----------------------	-------------	---------------------	----------------------------------	----------------

48490 UGAO-MRAVALLLES/VIZCAYA (SPAIN)
Tfno.: 946480211
Fax: 946480128
www.calibradosspradeera.es
Email: calibradoss@calibradosspradeera.es



MILL TEST

SHIP TO	CERT CODE:	DIE NUMBER	DATE OF SHIPMENT	ORDER NO.	MANIFEST NO.																	
S/DESCRIPTION	9	S 4660	Oct/19/2017	210182 - 9	379633																	
SO DESCRIPTION	CUSTOMER PO C74902	ALLOY 6061	TEMPER T6511	SALESMAN HOUSE ACCOUNTS	MADE IN CANADA																	
CUSTOMER PART NUMBER	V836661	PART DESCRIPTION	2.5 x 1.5 FB	CERTIFICATION ASTM B221-14 - AMS QQA 2007B																		
Mechanical Properties																						
Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation																	
A.11	6061	Oct/13/2017	42.30	38.40	12.80																	
Chemical Composition																						
Cast Number	Lot	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ga	Y	B	Zr	Bi	Pb	Sn	Co	Al	Si	Other
3B6350	A.11	6061	0.6	0.15	0.21	0.04	0.87	0.07	0	0.01	0.02	0	0	0	0	0	0	0	0	0	0	0

We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper specifications.



Tulsi Ram Mohabir
Quality Control Manager

Evan Eng, Quality Assurance Manager

[Signature]

agreed upon specifications provided written notification is received by Can Art within 30 days from the date of shipment
incurred during the customers manufacture and sale of its products, and is subject only to the replacement of any materials not within
Aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs which may be
Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with

Country of Origin: ONTARIO, CANADA

Applicable Specifications: ASTM B21-14 AMS-QQ-A200/8A

Sample ID	Cast #	Loa#	Test	Ultimate Tensile	Yield 2% offset	Elongation 2" gauge length	10/31/17	49.37	45.55	14.8
Mechanical Properties										

Cast #	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other Each	Other Total
38355	0.56	0.24	0.21	0.08	0.84	0.06	0.02	0.01	0.05	0.15

Maximum

Chemical Composition

Alloy: F804036 Part: 160001446 Description: 1.250 x 3.000 RECT. BAR
 Alloy: Temper: 6061 T651 Print Date: 11/21/17
 Ticket: 5569619

Manifest: 332924

5569619

Ticket:

5569619

Material Test Report

CAN ART
ALUMINUM EXTRUSION LTD.

Evan Eng, Quality Assurance Manager

Signature

Agreed upon specifications provided within notification is received by Can Art within 30 days from the date of shipment incurred during the customer's manufacture and sale of its products, and is subject only to the replacement of any materials not within aluminum Association and agreed upon customer specifications. Can Art assumes no liability for additional costs not within Can Art Aluminum Extrusion Inc. certifies that materials shipped under this order have been inspected and tested in accordance with

Country of Origin: ONTARIO, CANADA
Applicable Specification: ASTMB221-14 AMS-QQ-A200/8A

Sample	Cast #	Lot #	Test	Ultimate	Tensile	Yield	Elongation	ID
427847	3B6402	A11	8/9/17	41.86	38.62	8.9		

Mechanical Properties

Cast Num	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Other Face	Other Total	Maximum
3B6402	0.60	0.19	0.23	0.04	0.84	0.05	0.01	0.02	0.05	0.15	

Alloy: E505740 Part: 5131-8251 Print Date: 8/16/17
Temp: 6061 T651 Description: 1.000 x 2.000

Our Order: 437823 - 2 Cust. P.O.: 792398

5552835

Ticket#

Manufacturer: 328412

Material Test Report

CAN ART

ALUMINUM EXTRUSION L.P.

49987
R6.11903

4AL-12-V

#32419-7

MILL TEST

SHIP TO ACIER CAMP	CERT CODE: 1	DIE CODE: S	DIE NUMBER 4658	DATE OF SHIPMENT Sep/07/2017	ORDER NO. 208405 — 1	MANIFEST NO. 377291																
SO DESCRIPTION 1" X 6" FLAT BAR	CUSTOMER PO 106802	ALLOY 6061	TEMPER T6	SALESMAN HOUSE ACCOUNTS	MADE IN CANADA	CERTIFICATION MILL TEST ASTM B221-14																
CUSTOMER PART NUMBER DT04658	PART DESCRIPTION 1" X 6" FLAT BAR																					
Mechanical Properties																						
Lot	Alloy	Test Date	Ultimate Tensile Strength (KSI)	Yield Strength (KSI)	Percent Elongation	Hardness Rockwell F																
A.11	6061	Sep/07/2017	42.80	40.30	10.30	90.9, 91.1, 91.5																
Chemical Composition																						
Cast Number	Lot	Alloy	Si	Fe	Cu	Mn	Mg	Cr	Ni	Zn	Ti	Ge	Y	B	Zr	Bi	Pb	Sn	Cr	Co	Al	Other
37241	A.11	6061	0.576	0.216	0.189	0.06	0.832	0.056	0	0.023	0.019	0	0	0	0	0	0	0	0	0	0	0

We certify that the following extrusions have been quality inspected/tested and conforms to required dimensional and temper specifications.



Tulsi Ram Mohabir
Quality Control Manager



North American Stainless Canada Inc.
740 Imperial Road North
Guelph, ON N1K 1Z3

50230
106870 Highway 42 East
Ghent, KY 41045-9615
(502) 347-6000

certificate: 373018 31

007080 003
Champlain

Date: 1/19/2018 Page: 1

卷之三

Corporation: 15TH A262/15 Prac A/E or

REVIEW ARTICLE

Round Bar, Annaled, Cold Draw

30400/30403 10204 3.1,

NAS Order: IN 0257931 04 Heat Treat Code: 44,987

PRODUCT DESCRIPTION:

COMPLIES W/ REQUIREMENTS OF DYAR 252.225-7009 AND DIRECTIVE 2001/14/EC

4011/65/ED. NO.98. ENF+AOD+CC. NO WELD REPAIR. MELTED AND MFG IN USA FREE FROM MERCURY AND LOW MELTING ALLOY CONTAMINATION

318

Product Id	Slid & Diameter	Size	Weight	Length-----	Mark	Pieces Commodity Code
EJ2280 9		3750	1.204	14		

C H E M I C A L A N A L Y S I S

MECHANICAL PROBLEMS

Product ID	14 C.R.	HR No.	.2VS KSI	UTS KSI	RA %	Elng %
052280 9	R.L	226.0	84.97	111.55	69.24	61.70

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAC.

Technical
Debt. Why

KRIS LARK 1/19/2018

Page 1 of 2

Plant Serial: 00273359
Kaiser Order Number: 6025801
Line Item: 002

MANUFACTURED IN USA MADE IN JSA
MERCURY IS NOT A NORMAL BACKGROUND ELEMENT IN ALUMINUM ALLOYS. NEITHER MERCURY NOR ANY
OF ITS COMPOUNDS ARE TYPICALLY FOUND IN THE MANUFACTURE OF THIS MATERIAL.

Miscellaneous Notes

PER ASTM-B221-14, SIEGELLED ASME-SR221 2009 SEC'T II PER AMS-QQ-A-203/8A UNS# A96061
APPLICABLE Requirements:
MEETS ALL SPECIFICATIONS REQUIREMENTS FOR 6061-T6511/C6 ELEVATED MINIMUM MECHANICAL
PROPERTIES AS FOLLOWS: UTS = 42.0 ksi MIN YIELD = 38.0 ksi MIN ELONGATION = 10.0% MIN

Applicable Requirements:

LIMITS	Si	Fe	Ca	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Total
Maxmium	0.80	0.70	0.40	0.15	0.15	1.20	0.35	0.25	0.15	0.05	0.05	Ea	Total
Minium	0.16	0.15	0.00	0.15	0.00	0.80	0.04	0.00	0.00	0.00	0.00	0.15	1.15

Chemical Composition (wt%), Aluminum Remainder

REF ID	REFERENCE	DAWS#	SMILE#	UTS (KSI)	YTS (KSI)	ELONG ⁴	HARDNESS	CONDUC ^T .	HEND
Z00238043	0001	0001	52.8	50.0	19.2	RS	93	N/A	N/A
Z00238043	0001	0002	51.2	48.5	19.3	RS	93	N/A	N/A
Z00238043	0001	0003	52.7	50.0	19.3	RS	93	N/A	N/A
Z00238043	0001	0004	51.3	48.6	19.3	RS	93	N/A	N/A
Z00238043	0001	0005	51.3	48.6	20.4	RE	93	N/A	N/A
Z00238043	0001	0006	50.6	47.9	19.7	RE	93	N/A	N/A
Z00238043	0001	0007	51.1	48.4	19.7	RE	94	N/A	N/A
Z00238043	0001	0008	50.6	47.9	19.8	RE	93	N/A	N/A
Z00238043	0001	0009	51.1	48.4	19.8	RE	93	N/A	N/A

Actual Physical Properties

VM-640062-2	78/STK	KAISER SELECT PRECISION ROD 1.125+.005	LINE ITEM	SHIP DATE	KAISER PART NUMBER	SHIP ORDER NUMBER
6025801	002	02/21/2017	001	200238043	0061	002
WEIGHT SHIPPED	QUANTITY	02/21/2017	ALL DAY	MANUFACTURER	WIDTH	1024.000 LB
1025801	73.000 PCS	618286		618286	LENGTH	12.000 FT
SOLD TO:						

CERTIFIED TEST REPORT

KAISER ALUMINUM
FABRICATED PRODUCTS

Certificate of Mill Test Results

2008

Document number: 000000183
Document title: Test report for the
product "Smartphone X" (Model: S12345)
Test date: 2023-10-15
Test location: Quality Control Department, ABC Electronics, Inc.
Testers: John Doe, Jane Smith
Test results:
1. Battery life: Passed (4 hours 30 minutes)
2. Water resistance: Failed (Leaked after 10 minutes of immersion)
3. Screen durability: Passed (No visible damage after 1000 cycles)
4. Processor performance: Passed (Met requirements)
5. Camera quality: Failed (Poor low-light performance)
6. Overall user experience: Passed (Satisfactory)
Conclusion: The product "Smartphone X" (Model: S12345) has passed the majority of the tests, but failed the water resistance and camera quality tests. Further investigation is required to address these issues.

SHIN-OCE EXTRUCTION INDUSTRY LTD.
KABBE RONDE ALUMINUM 6061-T6S1
1135-DIA X 144.0000
PART NO.

Plant Serial: 00273359
Kaiser Order Number: 6025801
Line Item: 002
Kaiser Order Number: 6025801
Page 2 of 2

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications for a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

Almae L. Macnowski, Quality & Technology Manager



CERTIFICATION

KALAMAZOO, MI 49048

5205 KAISER DRIVE

KAISER ALUMINUM

KAISER ALUMINUM
FABRICATED PRODUCTS


CERTIFIED TEST REPORT
<http://Online.KaiserAluminum.com>

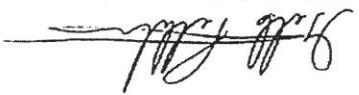
Certificate of MIL Test Results
26MAY17
BLVIM-S10002-001
PO/RD AC00006184
Sous certificons que le document reproduit ici est
de l'analyse fait par un laboratoire qualifié.
Nous certificons que le document reproduit ici est
l'œuvre exclusive du rapport fourni par le
laboratoire et que les données résultent
d'un examen effectué dans les conditions prescrites
dans les termes et conditions de vente.
SIGNÉ PAR:
B2

ACIER OUVERTE DIV. VALLEYFIELD
BARRÉ ROND ALUMINIUM 6061-T6S1
11.5" DIAX 14.0000".
PART NO.

Yours truly,
 Sincerelement vôtre,

date : 2016-10-06

We hereby certify that the material supplied meets the chemical properties as published by the
 ASTM B-221-14 except for section 8.2 (number of specimen).
 Nous certifions que le matériau fourni rencontra les exigences chimiques telles qu'annoncées par
 la norme ASTM B-221-14 excepte pour la section 8.2 (nombre de spécimen).
 Gilles Pelleifer
 Technique de la qualité



	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti
6351	0.7 - 1.3	0.5 Max	0.10 Max	0.40 - 0.80	0.40 - 0.80	...	0.20 Max	0.20 Max
6061	0.40 - 0.80	0.70 Max	0.15 - 0.40	0.15 Max	0.80 - 1.20	0.04 - 0.35	0.25 Max	0.15 Max
6005A	0.66 - 0.74	0.14 - 0.28	0.08 - 0.16	0.18 - 0.26	0.46 - 0.54	0.03 Max	0.10 Max	0.10 Max
6005	0.60 - 0.90	0.35 Max	0.10 Max	0.40 - 0.60	0.10 Max	0.10 Max	0.10 Max	0.10 Max
6063	0.20 - 0.60	0.35 Max	0.10 Max	0.45 - 0.90	0.10 Max	0.10 Max	0.10 Max	0.10 Max

Composition chimique typique / Typical chemical composition :

Dureté Rockwell E / Rockwell E hardness : 88 HR E
 Min. requis / Min. required : 88 HR E
 Max. permis / Max. permitted : 100 HR E

Couvercle / Capot # : 67081
 # Controle / Contrôle # : 76511-3
 Alliage & tempérage / Alloy & temper : 6061 T6
 Longueur / Length : 6097 mm
 Description : 1/4" O.D. ROD

de matrice / Die # : MS 13128
 # bon de commande / Purchase order # : OU-46528
 # commande Sapa / Sapa order # : 6090684

Adresse / Address : 4054 BOUL. LE CORBUSIER, #201
 Laval, QC
 H7L5R2
 Client / Customer : LES ACIERS TRANSBEC (1997) LTD.

Test de dureté Rockwell

ROCKWELL Hardness Test

49338

KHL-14-V

A 5155

SIGNATURE

21

DATE: 03/14/12

SIGNATURE
CLIENT:

LA-L-112-U #5119 49076 71a-1884

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

ENGINEERING SIGNOFF (if required)		QC 18 INSPECTION
DAS		INSPCETED BY: <u>11</u>
SIGNED OFF BY: <u> </u>		DATE: <u>9-89 MAR 19 2018</u>
DATE: <u> </u>		

testers located in the Quality Office

CUT SAMPLE PIECE OF MATERIAL AND PERFORMANCE A HARDNESS CHECK.					
RECORD RESULTS BELOW					
TYPE OF MATERIAL	CUT SAMPLE				
	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

MATERIAL CERT RECEIVED:	YES	NO
QUANTITY RECEIVED:	2,000	3,000
QUANTITY INSPECTED:	200	300
QUANTITY REJECTED:	0	0
THICKNESS RECEIVED:	2.000	2.000
THICKNESS ORDERED:	2.000	2.000
SHET SIZE RECEIVED:	11/4	11/4
SHET SIZE ORDERED:	11/4	11/4

DATE: MAR 19 2018
MATERIAL: 460614682.000

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

D

PURCHASE MATERIAL: 6061-T6/T651/T6510/T651/T62 ALUMINUM ROUND BAR

SPECIFICATION:

QQ-A-225B OR AMS-QQ-A-225B (OR AMS 4117/4128/4115/416)

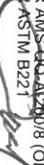
OR QQA-2008 OR AMS-QQ-A-2008 (OR AMS 4160)

OR ASTM B211 OR ASTM B221

PART NUMBER:

M6061T6R(D,DDD)

DIA.



A

WHERE "D,DDD" = DIAMETER IN INCHES

EG. 5/8" ROUND BAR = M6061T6R0.625

C

C

B

B

B	REFORMAT DWG. ADD B211& B221 SPEC (ZN DB-1), REF FAR 08-020A	CP	09/07/13
A	NEW ISSUE	DS	01/06/08
REV.	DESCRIPTION	BY	DATE
DESIGN	DART AEROSPACE LTD DRAWN BY: <i>J. M. M.</i> HAWKESBURY, ONTARIO, CANADA		
DRAWN	CHECKED	DRAWING NO.	REV. B
REV. B	<i>J. M. M.</i>	M6061T6R	SHEET 1 OF 1
MFG. APPR.	<i>J. M. M.</i>	TITLE	SCALE
APPROVED	<i>J. M. M.</i>	6061-T6 ROUND BAR	NTS
DE APPR.	<i>J. M. M.</i>	DATE	09/07/13
		COPYRIGHT © 2009 BY DART AEROSPACE LTD	NOT TO SCALE. FOR ANY PURPOSE, WITHOUT THE EXPRESS WRITTEN CONSENT OF DART AEROSPACE LTD.

RELEASED
2009-09-09
M. M.

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY:	DAS 11	
SIGNED OFF BY:		
DATE: 9-89 MAR 19 2018		

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					
RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRG	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL DRAWING	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN	<input checked="" type="checkbox"/>	
EXTENSION REPORT	<input checked="" type="checkbox"/>	

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 1.500
 THICKNESS ORDERED: 1.500
 QUANTITY INSPECTED: 1.500
 SHEET SIZE ORDERED: 1.500
 SHEET SIZE RECEIVED: 1.500
 QUANTITY REJECTED: 0
 MATERIAL CERT RECEIVED: NO
 DATE: MAR 19 2018

MATERIAL: M6061f6R1.500
 PO / BATCH NO: 039320/5032637

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPPECTED BY: <i>DAs</i>	SIGNED OFF BY: <i>11</i>
DATE: <i>9-89 MAR 19 2018</i>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					
RECORD RESULTS BELOW					
TYPE OF MATERIAL	HR C	HR B	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

DESCRIPTION	NCR	Comments
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<i>Y</i>
CORRECT FINISH	<input checked="" type="checkbox"/>	<i>Y</i>
CORROSION	<input checked="" type="checkbox"/>	<i>Y</i>
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<i>Y</i>
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	<i>Y</i>
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<i>Y</i>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<i>Y</i>
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	<i>Y</i>
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<i>Y</i>
ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	<i>Y</i>
DOES THIS MATERIAL REQUIRE	<input checked="" type="checkbox"/>	<i>Y</i>
SIZE OF TEST SAMPLE		
HARDNESS / DUROMETER READING		

MATERIAL CERT RECEIVED: *YES* DATE: *MAR 19 2018*
 QUANTITY RECEIVED: *0.350* SHEET SIZE RECEIVED: *0.350*
 QUANTITY INSPECTED: *0.350* SHEET SIZE ORDERED: *0.350*
 MATERIAL CERT RECEIVED: *YES* DATE: *MAR 19 2018*
 QUANTITY RECEIVED: *0.350* SHEET SIZE ORDERED: *0.350*
 QUANTITY INSPECTED: *0.350* SHEET SIZE RECEIVED: *0.350*

MATERIAL: *16061H61Q.250* PO / BATCH NO: *039320/SC52636*

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

D

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR

SPECIFICATION: QQ-A-2258 OR AMS-QQ-A-2258 (OR AMS 4117/4128/4115/4116)

OR QQ-A-2008 OR AMS-QQ-A-2008 (OR AMS 4160)

OR ASTM B211 OR ASTM B221

M6061T6R[DIA]

|DIA|

△

WHERE "D.DDD" = DIAMETER IN INCHES

EG. 5/8" ROUND BAR = M6061T6R0.625

C

C

B

B

RELEASED		2009-09-09	
<i>M7</i>			
B	REFORMAT DWG. ADD B2118, B221 SPEC (ZN DB-1), REF PART 08420A	GP	09/07/13
A	NEW ISSUE	DS	01/06/08
REV.	DESCRIPTION	BY	DATE
DESIGN	DART AEROSPACE LTD		
DRAWN	HAWKESBURY, ONTARIO, CANADA		
CHECKED	DRAWING NO.		
MFG. APPR	M6061T6R		
APPROVED	TITLE		
DE APPR.	6061-T6 ROUND BAR		
DATE	09.07.13		
COPYRIGHT © 2009 BY DART AEROSPACE LTD		REV. B	SHEET 1 OF 1
NOT DRAWN TO SCALE. DRAFTS ARE FOR INFORMATION ONLY AND ARE NOT TO BE USED FOR CONSTRUCTION. DRAFTS ARE THE PROPERTY OF DART AEROSPACE LTD.		SCALE	NTS

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

QC 18 INSPECTION	ENGINEERING SIGN OFF (if required)
INSPPECTED BY: DAS	SIGNED OFF BY: 11
DATE: 9-89 MAR 19 2018	

RECORD RESULTS BELOW					
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					
TYPE OF MATERIAL	HRc	HRB	DUR A	DUR D	WEBSTER
	SIZE OF TEST SAMPLE				
	HARDNESS / DUROMETER READING				

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL PER-M DRAWING	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE	<input checked="" type="checkbox"/>	
ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE	<input checked="" type="checkbox"/>	
SIZE OF TEST SAMPLE		
TYPE OF MATERIAL		
TESTERS LOCATED IN THE QUALITY OFFICE		

MATERIAL CERT REC'D: **YES**
 THICKNESS ORDERED: **1.125**
 THICKNESS RECEIVED: **1.125**
 SHEET SIZE ORDERED: **1.125**
 SHEET SIZE RECEIVED: **1.125**
 QUANTITY INSPECTED: **12**
 QUANTITY RECEIVED: **12**
 SHEET SIZE RECEIVED: **1.125**
 QUANTITY REJECTED: **0**
 QUANTITY REJECTE: **0**

MATERIAL: **M606146R1.125**
 PO / BATCH NO: **039320/502A635**
 DATE: **MAR 19 2018**

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR

QQ-A-225/8 OR AMS-QQA-A-225/8 (OR AMS 41174/12841154116)
OR QQ-A-20018 ORB AMS QQA 20018 ORB AMS 41174/12841154116

OR ASTM B211 OR ASTM B22

PART NUMBER: M6061T6R|D.DDD|
DIA.

WHERE "D.DDD" = DIAMETER IN INCHES
E.G. 5/8" ROUND BAR = M6061T6R0.625

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511

EG. 5/8" ROUND BAR = M6061T6R0.625
WHERE "D.BBB" = DIAMETER IN INCHES

6

33

RELEASED
2009-09-09
MAP

		REFORMAT DWG. ADD B2118, B221 SPEC1 (2N DB-1), REF-FAR 09-020A		
A	REV.	NEW ISSUE		
DESIGN		DESCRIPTION		
DRAWN	DRAWN	CP	09.07.13	
CHECKED	CHECKED	DS	01.06.08	
MFG. APPR.	MFG. APPR.	BY	DATE	
APPROVED	APPROVED	DART AEROSPACE LTD		
DE APPR.	DE APPR.	HAWKESBURY, ONTARIO, CANADA		
DATE	DATE	DRAWING NO.	REV. B	
09.07.13	09.07.13	M606176R	SHEET 1 OF 1	
		TITLE	SCALE	
		6061-T6 ROUND BAR		
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QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPPECTED BY:	DAS 11	SIGNED OFF BY:
		DATE: 9-89 MAR 19 2018

CUT SAMPLE PIECE OF MATERIAL AND PEFORM A HARDNESS CHECK.					
RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
	SIZE OF TEST SAMPLE				
	HARDNESS / DUROMETER READING				

Testers located in the Quality Office

DESCRIPTION	NCR	Check (Y/N)	COMMENTS
SURFACE DAMAGE	Y	N	
CORROSION	Y	N	
CORRECT GRAIN DIRECTION	Y	N	
CORRECT MATERIAL PER-M-DRAWING	Y	N	
CORRECT THICKNESS	Y	N	
PHOTO REQUIRED	Y	N	
CORRECT MATERIAL IDENTIFICATION	Y	N	
CORRECT REFL # TO LINK CERT	Y	N	
CORRECT M# ON THE MATERIAL	Y	N	
ENGINEERING SIGN OFF	Y	N	
DOES THIS MATERIAL REQUIRE	Y	N	
SIZE OF TEST SAMPLE	Y	N	
TYPE OF MATERIAL	Y	N	
RECORD RESULTS BELOW	Y	N	
TESTERS LOCATED IN THE QUALITY OFFICE	Y	N	
EXTRUSION REPORT	Y	N	
DOES THIS REQUIRE AN	Y	N	
TESTERS LOCATED IN THE QUALITY OFFICE	Y	N	

MATERIAL CERT REC'D: YES
 THICKNESS ORDERED: 0.325
 SHEET SIZE ORDERED: 36'
 QUANTITY INSPECTED: 36'
 QUANTITY RECEIVED: 36'
 SHEET SIZE RECEIVED: 36'
 SHEET SIZE RECEIVED: 36'
 QUANTITY RECEIVED: 36'
 QUANTITY RECEIVED: 36'

MATERIAL: M3080325
 DATE: MAR 19 2018
 PO / BATCH NO: 039320/80325/1

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS ROUND BAR
NOTE: AISI does not accept any
material with a diameter of 1/2" or greater.

NOTE: ANSI 303 NOT ACCEPTABLE

SPECIFICATION: ASTM A276

PART NUMBER: M304R|D.DDD|

DIA.

WHERE "B.BBB" = DIAMETER IN INCHES

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SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS ROUND BAR
(NOTE: AISI 303 NOT ACCEPTABLE)

SPECIFICATION: ASTM A276

PART NUMBER: M304R D DDD

WHERE "D.DDD" = DIAMETER IN INCHES
EG. 0.75" ROUND BAR = M304R0.750

RELEASED
01/08/2014

B REFORMATT DWG ADD SPECCS (2N-D6-1), REF-FAR 08-020A	
A REV.	NEW ISSUE
DESIGN	DESCRIPTION
DRAWN	AJS
DRAWN	BY
CHECKED	BY
MFG. APPR.	HAWKESBURY, ONTARIO, CANADA
APPROVED	M304R
DE APPR.	TITLE
DATE	09-07-15
DART AEROSPACE LTD	
HAWKESBURY, ONTARIO, CANADA	
DRAWING NO.	
SHEET 1 OF 1	
REV. B	
SCALE	
NTS	
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Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: DAS	SIGNED OFF BY: 11
DATE: 9-89 MAR 19 2018	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					
RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
CORRECT MATERIAL DRAWING	<input checked="" type="checkbox"/>	<i>15th B381</i>
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<i>15th B381</i>
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE THIS REPORT	<input checked="" type="checkbox"/>	
TESTERS LOCATED IN THE QUALITY OFFICE		

MATERIAL CERT REC'D: *Y*
 QUANTITY RECEIVED: *1.000*
 THICKNESS RECEIVED: *1.000*
 SHEET SIZE ORDERED: *1.000*
 QUANTITY INSPECTED: *1.000*
 SHEET SIZE RECEIVED: *1.000*
 QANTITY REJECTED: *0*
 SHEET SIZE RECEIVED: *1.000*
 DATE: *MAR 19 2018*

MATERIAL: *166014681.000X06.000*
 PO / BATCH NO.: *Q39320/8032633*

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY:	DAS 11	SIGNED OFF BY:
		DATE: 9-89 MAR 19 2018

RECORD RESULTS BELOW						TESTERS LOCATED IN THE QUALITY OFFICE
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D	WEBSTER	SIZE OF TEST SAMPLE
						HARDNESS / DUROMETER READING

DESCRIPTION	Comments
NCR (Check Y/N)	
SURFACE DAMAGE	Y (N)
CORRECT FINISH	Y (N)
CORRECT GRAIN DIRECTION	Y (N)
CORRECT MATERIAL PER-M-DRAWING	Y (N)
CORRECT THICKNESS	Y (N)
PHOTO REQUIRED	X (N)
CORRECT MATERIAL IDENTIFICATION	Y (N)
CORRECT M# ON THE MATERIAL	Y (N)
DOES THIS MATERIAL REQUIRE CERT	Y (N)
DOES THIS MATERIAL REQUIRE SIGN OFF	Y (N)
DOES THIS REQUIRE AN ENGINEERING SIGN OFF	Y (N)
EXTRUSION REPORT	Y (N)
TESTERS LOCATED IN THE QUALITY OFFICE	

MATERIAL CERT RECEIVED: *YES* QUANTITY RECEIVED: *40*
 THICKNESS ORDERED: *1.000* QUANTITY INSPECTED: *40*
 THICKNESS RECEIVED: *1.000* SHEET SIZE ORDERED: *40*
 MATERIAL CERT RECEIVED: *YES* SHEET SIZE RECEIVED: *40*
 QUANTITY RECEIVED: *40* QUANTITY REJECTED: *0*
 QUANTITY INSPECTED: *40*

MATERIAL: *M6014681.000X02.000* PO / BATCH NO: *039320/005632*
 DATE: *MAR 19 2018*

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

D

8

7

6

5

4

3

2

1

PURCHASE MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-2258 OR AMS-QQA-2258 (OR AMS 4117/4128/4115/4116)

OR QQ-A-2008 OR AMS-QQA-2008 (OR AMS 4160)

OR ASTM B211 OR ASTM B221

△

PART NUMBER:

M6061T6B | T.TTT | X | WW WWW

THICK | WIDTH

WHERE "TTT" = THICKNESS IN INCHES
"WW WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

C

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RELEASED
2009-05-02
MW

B	REMOVE QQ-A-250/1 OPTION, REFORMAT NOTES, ADD ASTM B211/B221 (2N-D7-1)	CP	09/07/13
A	NEW ISSUE	DS	01/06/08
DESCRIPTION			
REV.	DS	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	<i>DS</i>	HAWKESBURY, ONTARIO, CANADA	
CHEKED	<i>AS</i>	DRAWING NO.	REV. B
MFG APPR.	<i>AS</i>	M6061T6B	SHEET 1 OF 1
APPROVED	<i>AS</i>	TITLE	SCALE
DE APPR.	<i>AS</i>	6061-T6 BAR	NTS
DATE	09/07/13	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT CONTAINS TRADE SECRET INFORMATION AND IS SUBJECT TO THE EXPORT CONTROL ACT OF 1977 NOT FOR EXPORT OR DIVULGATION WITHOUT THE APPROVAL OF THE GOVERNMENT OF CANADA	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

GC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: DA	SIGNED OFF BY: DA	DATE: 9-89 MAR 19 2018

CUT SAMPLE PIECE OF MATERIAL AND PEEFORM A HARDNESS CHECK.					
RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRc	HRB	DUR A	DUR D	WEBSTER
	SIZE OF TEST SAMPLE				
	HARDNESS / DUROMETER READING				

Testers located in the Quality Office

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	
CORRECT MATERIAL PER DRAWING	<input checked="" type="checkbox"/>	<i>Asm R821</i>
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<i>Asm R821</i>
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	
CORRECT MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	
CUT SAMPLE PIECE OF MATERIAL AND PEEFORM A HARDNESS CHECK.		

MATERIAL CERT REC'D: **1.250** DATE: **MAR 19 2018**
 QUANTITY RECEIVED: **12** SHEET SIZE RECEIVED: **12**
 QUANTITY INSPECTED: **12** SHEET SIZE ORDERED: **12**
 THICKNESS RECEIVED: **1.250** SHEET SIZE RECEIVED: **12**
 MATERIAL CERT REC'D: **1.250** QUANTITY RECEIVED: **12**

MATERIAL: **M66617681.250X03.000** PO / BATCH NO: **039330/505631**

SPECIFICATION CONTROL DRAWING

D

PURCHASE MATERIAL: 6061-T6/T651/T651/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)

OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)

A

PART NUMBER:

M6061T6B | T.TTT | X | WW WWW

THICK | | | WIDTH

WHERE "T.TTT" = THICKNESS IN INCHES
"WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

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A	RELEASED 2009-05-13 M			
B	REMOVE QQ-A-250/11 OPTION, REFORMAT NOTES, ADD ASIM B21/8221 (ZN D7-1)	CP	09/07/13	
A	NEW ISSUE	DS	01/06/08	
REV	DESCRIPTION	BY	DATE	
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DRAWN		DRAWING NO.	REV. B	
CHECKED		M6061T6B	SHEET 1 OF 1	
MFG. APPR.		TITLE	SCALE	
APPRVED		6061-T6 BAR	NTS	
DE APPR.				
DATE	09/07/13			
		COPYRIGHT © 2001 BY DART AEROSPACE LTD PROTECTED BY CANADIAN AND U.S. PATENT AND TRADEMARK OFFICES NO FORGED OR COPIED PRINTED ON 100% RECYCLED PAPER PRINTED ON 100% RECYCLED PAPER PRINTED ON 100% RECYCLED PAPER		

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Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPPECTED BY: DAS	SIGNED OFF BY: 11
DATE: 9-89 MAR 19 2018	

RECORD RESULTS BELOW					
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					
TYPE OF MATERIAL	HRc	HRB	DUR A	DUR D	WEBSTER
	SIZE OF TEST SAMPLE				
	HARDNESS / DUROMETER READING				
	TESTERS LOCATED IN THE QUALITY OFFICE				

DESCRIPTION	NR	Comments (check Y/N)
SURFACE DAMAGE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CORRECT FINISH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CORROSION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CORRECT MATERIAL PER DRAWING	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PHOTO REQUIRED	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
DOES THIS REQUIRE AN EXTRUSION REPORT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

MATERIAL CERT REC'D: **Y** SHEET SIZE RECEIVED: **24"** QUANTITY RECEIVED: **24'**
 THICKNESS ORDERED: **0.1520** QUANTITY RECEIVED: **24'** QUANTITY REJECTED: **0/4**
 THICKNESS RECEIVED: **0.1520** SHEET SIZE ORDERED: **24"** SHEET SIZE RECEIVED: **24"**

MATERIAL: **M606146B21500X01500** PO / BATCH NO. **03932630 / 5052630** DATE: **MAR 19 2018**

SPECIFICATION CONTROL DRAWING

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PURCHASE MATERIAL: 6061-T6/T651/T651/T62 ALUMINUM BAR

SPECIFICATION: QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
OR QQ-A-2008 OR AMS-QQ-A-2008 (OR AMS 4160)
OR ASTM B211 OR ASTM B221

M6061T6B | T.TTT | X | WW.WWW |
THICK | | WIDTH |

WHERE "T.TTT" = THICKNESS IN INCHES
"WW.WWW" = WIDTH IN INCHES

E.G. 1.0" X 12.0" BAR = M6061T6B1.000X12.000

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RELEASED
2009-03-03
M

B	REMOVED QQ-A-22011 OPTION, REFORMAT NOTES, ADD ASTM B211(B221)(2ND DT-1)	CP	09.07.13
A	NEW ISSUE	DS	01.06.08
REV	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>RS</i>	DRAWING NO.	REV B
CHECKED	<i>RS</i>	M6061T6B	SHEET 1 OF 1
MFG APPR.	<i>RS</i>	TITLE	SCALE
APPROVED	<i>RS</i>	6061-T6 BAR	NTS
DE APPR.			
DATE	09.07.13	COPYRIGHT © 2004 BY DART AEROSPACE LTD ALL RIGHTS RESERVED. DRAFTING AND PRINTING ON THIS DRAWING IS FOR THE USE OF DART AEROSPACE LTD ONLY. IT IS NOT TO BE COPIED, REPRODUCED, OR USED FOR ANY OTHER PURPOSE.	

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GC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPPECTED BY: DAS	SIGNED OFF BY: 11	DATE: 9-89 MAR 19 2018

RECORDED RESULTS BELOW					
TYPE OF MATERIAL	HRG	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

DESCRIPTION	Comments
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
CORRECT FINISH	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
CORROSION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
DOES THIS MATERIAL REQUIRE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
DOES THIS REQUIRE AN	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>
EXTENSION REPORT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>

MATERIAL CERT REC'D: **YES**
 QUANTITY RECEIVED: **121**
 QUANTITY INSPECTED: **121**
 SHEET SIZE ORDERED: **0.313**
 SHEET SIZE RECEIVED: **0.313**
 THICKNESS RECEIVED: **0.313**
 THICKNESS ORDERED: **0.313**
 DATE: **MAR 19 2018**
 MATERIAL: **M1018R0313**
 PO / BATCH NO: **03930/5052629**

SPECIFICATION CONTROL DRAWING

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PURCHASE MATERIAL: AISI 1018-1025 ROUND BAR

SPECIFICATION: MIL-S-7997 OR ASTM A108PART NUMBER: M1018-R_D DDD WHERE D DDD = DIAMETER IN INCHES

EG. 7/8" ROUND BAR = M1018-R0.875

TOLENCES:

PER ASTM A108 AS FOLLOWS:

SIZE	TOLERANCE
UP TO 1.5" INCL.	+0.000/-0.002
OVER 1.5" TO 2.5" INCL.	+0.000/-0.003
OVER 2.5" TO 4.0" INCL.	+0.000/-0.004
OVER 4.0" TO 6.0" INCL.	+0.000/-0.005
OVER 6.0" TO 8.0" INCL.	+0.000/-0.006

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REFORMAT, ADD ASTM A108, ADD TOLERANCES		CP	12.09.05
A	NEW ISSUE	DS	01.06.12
REV.	DESCRIPTION	BY	DATE
A	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
DESIGN	DS		
DRAWN	CP		
CHECKED	A.P.		
MFG. APPR.	M1018-R	SHEET 1 OF 1	REV. B
APPROVED		SCALE	
DE APPR.		TITLE	1018-1025 ROUND BAR
DATE	12.09.05	NTS	COPYRIGHT © 2001 BY DART AEROSPACE LTD NOT TO BE USED FOR PRODUCTION OR COMMERCIAL PURPOSES. COPIES OF THIS DRAWING ARE NOT TO BE MADE OR COPIED UNLESS APPROVED BY DART AEROSPACE LTD.

RELEASE
2012-09-24

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GC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY:	DAS	SIGNED OFF BY:
		DATE: 9-89 MAR 19 2018

RECORDED RESULTS BELOW					
CUT SAMPLE PIECE OF MATERIAL AND PERFORMANCE HARDNESS CHECK.					
TYPE OF MATERIAL	HRG	HRB	DUR A	DUR D	WEBSTER
	SIZE OF TEST SAMPLE				
	HARDNESS / DUROMETER READING				

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	ASTM A340
CORRECT FINISH	<input checked="" type="checkbox"/>	
CORROSION	<input checked="" type="checkbox"/>	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	
PHOTO REQUIRED	<input checked="" type="checkbox"/>	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	REF# L2513C03
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	
DOES THIS MATERIAL REQUIRE EXTRUSION REPORT	<input checked="" type="checkbox"/>	
TESTERS LOCATED IN THE QUALITY OFFICE		

MATERIAL CERT REC'D: 186A
 QUANTITY RECEIVED: 128 lbs
 THICKNESS ORDERED: 186A
 SHEET SIZE ORDERED: 186A
 SHEET SIZE RECEIVED: 186A
 QUANTITY RECEIVED: 128 lbs
 SHEET SIZE ORDERED: 186A
 SHEET SIZE RECEIVED: 186A

MATERIAL: M3045186A
 PO / BATCH NO: 039320/50526828
 DATE: MAR 19 2018

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

D

PURCHASE MATERIAL: ANSI 304/316 SS SHEET
ANNEALED

SPECIFICATION:

MILL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASTM A240
OR ASME SA240

FINISH:

FINISH	DART M- NUMBER
UNPOLISHED	IDENTIFIER
No. 1	1P
UNPOLISHED	2D
No. 2B	NONE
POLISHED	3P
No. 3	4P
POLISHED	6P
No. 4	7P
BUFFED	8P
No. 6	
BUFFED	
No. 7	
BUFFED	
No. 8	

PART NUMBER:

M304S TT GA #P

WHERE "TT" = GAUGE THICKNESS
WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET 2B FINISH = M304S16GA
EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021875	0.0198 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.041	0.040 - 0.046
18	0.050	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.06875	0.066 - 0.072
14	0.075	0.073 - 0.083
13	0.09375	0.084 - 0.098
12	0.109375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.140625	0.131 - 0.145
9	0.15625	0.146 - 0.160
8	0.171875	0.161 - 0.176
7	0.1875	0.182 - 0.194
6	0.2031	0.194 - 0.212
5	0.2188	0.201 - 0.228
4	0.2344	0.225 - 0.243
3	0.2500	0.228 - 0.262
2	0.2656	0.254 - 0.278
1	0.2813	0.269 - 0.293
0	0.3125	0.301 - 0.325

RELEASED

2015 FEB 04
ECC 15-122
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D	ADDED GAUGES D7.		
C	DEFINED FINISH OPTION (ZN C8) AND EXAMPLE OF MATERIAL PIN WITH FINISH OTHER THAN 2B (ZN B5).	MB	12.09.20
B	REFORMAT Dwg. ADD ASTM/ASME SPECS (ZN DB-1), ADD GAUGE REF (C04-1), REF PAR 08-020A	CP	09.06.01
A	NEW ISSUE	DS	01.09.24
REV.	DESCRIPTION	BY	DATE
DESIGN	DS	DART AEROSPACE LTD	
DRAWN	AS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	R	DRAWING NO.	
MFG. APPR.	M304S	REV. D	
APPROVED		SHEET 1 OF 1	
DE APPR.		SCALE	NTS
DATE	15.01.06	This document is private and confidential and is not to be reproduced, distributed, or communicated to any other person without the express written permission of DART Aerospace Ltd.	

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GC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: DAS	SIGNED OFF BY: 11	DATE: 9-8 MAR 19 2018

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.					
RECORD RESULTS BELOW					
TYPE OF MATERIAL	HRc	HRB	DUR A	DUR D	WEBSTER
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

DESCRIPTION	NCR	Check (Y/N)	COMMENTS
SURFACE DAMAGE	<input checked="" type="checkbox"/>	N	
CORROSION	<input checked="" type="checkbox"/>	N	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	<i>After 4340</i>
CORRECT MATERIAL PER-DRAWING	<input checked="" type="checkbox"/>	N	<i>459P</i>
PHOTO REQUIRED	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	<input checked="" type="checkbox"/>	N	
DOES THIS REQUIRE AN ENGINEERING REPORT	<input checked="" type="checkbox"/>	N	
TESTERS LOCATED IN THE QUALITY OFFICE			

MATERIAL CERT REC'D:	<i>116A</i>	QUANTITY RECEIVED:	<i>64Pz</i>
THICKNESS ORDERED:	<i>4x8</i>	QUANTITY INSPECTED:	<i>64Pz</i>
THICKNESS RECEIVED:	<i>64Pz</i>	QUANTITY REJECTED:	<i>0</i>
PO / BATCH NO.:	<i>03932d5052627</i>	SHEET SIZE RECEIVED:	<i>4x8</i>

MATERIAL RECEIPT INSPECTION FORM

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SHEET

SPECIFICATION:

MILL-S-5059
OR AMS 5513 (304)
OR AMS 5524 (316)
OR ASME SA240
OR ASME SA280

FINISH:

FINISH	DART NUMBER
UNPOLISHED No. 1	1P
UNPOLISHED No. 2D	2D
UNPOLISHED No. 2B	NONE
POLISHED No. 3	3P
POLISHED No. 4	4P
BUFFED No. 6	6P
BUFFED No. 7	7P
BUFFED No. 8	8P

PART NUMBER:

M304S TT GA #P

WHERE "TT" = GAUGE THICKNESS
WHERE "#P" = FINISH IDENTIFIER

EG. 16 GAUGE SS SHEET No. 4 POLISHED = M304S16GA4P

GAUGE THICKNESS REFERENCE:

GAUGE	NOM. THICK. (IN)	THICKNESS RANGE (IN)
26	0.01875	0.0178 - 0.019
25	0.021675	0.0198 - 0.023
24	0.025	0.024 - 0.026
23	0.028125	0.027 - 0.029
22	0.03125	0.030 - 0.032
21	0.034375	0.033 - 0.035
20	0.0375	0.036 - 0.040
19	0.04375	0.041 - 0.046
18	0.050	0.047 - 0.052
17	0.05625	0.053 - 0.058
16	0.0625	0.059 - 0.065
15	0.0703125	0.066 - 0.072
14	0.078125	0.073 - 0.083
13	0.09375	0.084 - 0.098
12	0.109375	0.099 - 0.114
11	0.125	0.115 - 0.130
10	0.14025	0.131 - 0.145
9	0.15625	0.146 - 0.160
8	0.171875	0.161 - 0.176
7	0.1875	0.182 - 0.194
6	0.2031	0.194 - 0.212
5	0.2188	0.201 - 0.228
4	0.2344	0.225 - 0.243
3	0.2500	0.238 - 0.262
2	0.2656	0.254 - 0.278
1	0.2813	0.269 - 0.293
0	0.3125	0.301 - 0.325

RELEASED

2015 FEB 04

ECS-15-122

47

D		ADDED GAUGES D7.	
C	DEFINED FINISH OPTION (ZN C8) AND EXAMPLE OF MATERIAL PIN WITH FINISH OTHER THAN 2B (ZN D5).		AJS
B	REFORMAT Dwg. ADD AS/MA/ME SPECS (ZN D8-1), ADD GAUGE REF (COP1), REF P&R 05202A		MB
A	NEW ISSUE		09 06 01
REV.		DS	01 09 24
DESCRIPTION		BY	DATE
DESIGN	D _S	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	R	DRAWING NO	
MFG. APPR.		M304S	
APPROVED		REV. D	SHEET 1 OF 1
DE APPR.		SCALE	NTS
DATE	15.01.06	304/316 SS SHEET	

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